



Multiple pregnancy: twin and triplet pregnancies

Quality standard

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This standard is based on NG137.

This standard should be read in conjunction with QS22, QS32, QS35, QS37, QS3, QS4, QS15, QS60, QS69, QS75, QS105, QS115, QS162 and QS169.

Introduction

This quality standard covers the management of twin and triplet pregnancies in the antenatal period. For more information, see the <u>multiple pregnancy scope</u>.

Why this quality standard is needed

The incidence of multiple births has risen in the last 30 years. In 1980, 10 women per 1000 had multiple births in England and Wales compared with 16 per 1000 in 2011. This increase in multiple births is due mainly to the use of assisted reproduction techniques, including in vitro fertilisation (IVF). Older women are more likely to have a multiple pregnancy and, because the average age at which women give birth is rising, this is also a contributory factor. Multiple births currently account for 3% of live births.

Multiple pregnancy is associated with higher risks for the mother and babies. Maternal mortality associated with multiple births is 2.5 times that for singleton births. The risk of preterm birth is also considerably higher in multiple pregnancies than in singleton pregnancies, occurring in at least 50% of twin pregnancies. The significantly higher preterm delivery rates in twin and triplet pregnancies result in increased demand for specialist neonatal resources.

Risks to fetuses depend partly on the chorionicity (number of chorionic [outer] membranes) and amnionicity (number of amnion [inner] membranes) of the pregnancy. Feto-fetal transfusion syndrome, a condition associated with a shared placenta, can occur in monochorionic pregnancies and accounts for about 20% of stillbirths in multiple pregnancies. Additional risks to the fetuses include intrauterine growth restriction and congenital abnormalities.

How this quality standard supports delivery of outcome frameworks

NICE quality standards are a concise set of prioritised statements designed to drive measureable quality improvements within a particular area of health or care. They are derived from high-quality guidance, such as that from NICE or other sources accredited by NICE. This quality standard, in conjunction with the guidance on which it is based, should contribute to the improvements outlined

in the following 2 outcomes frameworks published by the Department of Health:

- NHS Outcomes Framework 2013/14
- Improving outcomes and supporting transparency: a public health outcomes framework for England 2013–2016, Part 1 and Part 1A.

Tables 1 and 2 show the outcomes, overarching indicators and improvement areas from the frameworks that the quality standard could contribute to achieving.

Table 1 NHS Outcomes Framework 2013/14

Domain	Overarching indicators and improvement areas		
1 Preventing people from dying prematurely	Improvement areas		
	Reducing deaths in babies and young children		
	1.6i Infant mortality*		
	1.6ii Neonatal mortality and stillbirths		
4 Ensuring that people have a positive experience of	Improvement areas		
care	Improving women and their families' experience of maternity services		
	4.5 Women's experience of maternity services		
5 Treating and caring for people in a safe environment and protecting them from avoidable harm	Improvement areas Improving the safety of maternity services		
	5.5 Admission of full-term babies to neonatal care		

Alignment across the health and social care system

Table 2 Public health outcomes framework for England, 2013–2016

Domain	Objectives and indicators
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^{*} Indicator shared with Public Health Outcomes Framework (PHOF)

* Indicator shared with NHS Outcomes Framework (NHSOF)

4 Healthcare, public health and preventing premature mortality	Objective Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities Indicators 4.1 Infant mortality*
Alignment across the health a	nd social care system

Coordinated services

The quality standard for multiple pregnancy specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole multiple pregnancy care pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to women with a multiple pregnancy.

The Health and Social Care Act 2012 sets out a clear expectation that the care system should consider NICE quality standards in planning and delivering services, as part of a general duty to secure continuous improvement in quality. Commissioners and providers of health and social care should refer to the library of NICE quality standards when designing high-quality services. Other quality standards that should also be considered when choosing, commissioning or providing a high-quality multiple pregnancy service are listed in <u>related quality standards</u>.

Training and competencies

The quality standard should be read in the context of national and local guidelines on training and competencies. All healthcare practitioners involved in assessing, caring for and treating women with a multiple pregnancy should have sufficient and appropriate training and competencies to deliver the actions and interventions described in the quality standard.

List of quality statements

<u>Statement 1</u> Women with a multiple pregnancy have the chorionicity and amnionicity of their pregnancy determined using ultrasound and recorded between 11 weeks 0 days and 13 weeks 6 days.

<u>Statement 2</u> Women with a multiple pregnancy have their fetuses labelled using ultrasound and recorded between 11 weeks 0 days and 13 weeks 6 days.

<u>Statement 3</u> Women with a multiple pregnancy are cared for by a multidisciplinary core team.

<u>Statement 4</u> Women with a multiple pregnancy have a care plan that specifies the timing of appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

<u>Statement 5</u> Women with a multiple pregnancy are monitored for fetal complications according to the chorionicity and amnionicity of their pregnancy.

<u>Statement 6</u> Women with a higher-risk or complicated multiple pregnancy have a consultant from a tertiary level fetal medicine centre involved in their care.

<u>Statement 7</u> Women with a multiple pregnancy have a discussion by 24 weeks with one or more members of the multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

<u>Statement 8</u> Women with a multiple pregnancy have a discussion by 28 weeks with one or more members of the multidisciplinary core team about the timing of birth and possible modes of delivery so that a birth plan can be agreed.

Quality statement 1: Determining chorionicity and amnionicity

Quality statement

Women with a multiple pregnancy have the chorionicity and amnionicity of their pregnancy determined using ultrasound and recorded between 11 weeks 0 days and 13 weeks 6 days.

Rationale

If fetuses share a placenta, there is a greater risk of complications. Determining chorionicity and amnionicity allows women to be assigned the correct plan of care for their pregnancy.

Pregnancy risks, clinical management and subsequent outcomes are different for monochorionic and dichorionic twin pregnancies (and for monochorionic, dichorionic and trichorionic triplet pregnancies). Therefore, accurate determination of chorionicity is important.

Quality measures

Structure

Evidence of local arrangements to ensure that women with a multiple pregnancy have an ultrasound scan between 11 weeks 0 days and 13 weeks 6 days to determine and record the chorionicity and amnionicity of their pregnancy.

Data source: Local data collection.

Process

The proportion of women with a multiple pregnancy who receive an ultrasound scan between 11 weeks 0 days and 13 weeks 6 days to determine and record the chorionicity and amnionicity of their pregnancy.

Numerator – the number of women in the denominator who received an ultrasound scan between 11 weeks 0 days and 13 weeks 6 days to determine and record the chorionicity and amnionicity of their pregnancy.

Denominator – the number of women with a multiple pregnancy of greater than 14 weeks' gestation.

Data source: Local data collection. The Maternity Services Data Set collects data on:

- Offer status dating ultrasound scan (global number 17201960).
- Gestation dating ultrasound scan (global number 17202010).
- Number of fetuses dating ultrasound scan (global number 17202020).

Outcome

Determination of chorionicity and amnionicity.

Data source:Local data collection.

What the quality statement means for different audiences

Service providers ensure that systems are in place for women with a multiple pregnancy to have an ultrasound scan between 11 weeks 0 days and 13 weeks 6 days to determine and record the chorionicity and amnionicity of their pregnancy.

Healthcare practitioners ensure that women with a multiple pregnancy have an ultrasound scan between 11 weeks 0 days and 13 weeks 6 days to determine and record the chorionicity and amnionicity of their pregnancy.

Commissioners ensure that they commission specialist services that provide ultrasound scanning between 11 weeks 0 days and 13 weeks 6 days for women with a multiple pregnancy to determine and record the chorionicity and amnionicity of their pregnancy.

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) have an ultrasound scan between 11 weeks and 13 weeks 6 days of their pregnancy. This is to see whether the babies share the same placenta (chorionicity) and amniotic sac (amnionicity). This information is recorded in the woman's notes.

Source guidance

Twin and triplet pregnancy (2019) NICE guideline NG137, recommendations 1.1.1 and 1.1.3

Definitions of terms used in this quality statement

Multiple pregnancy

A multiple pregnancy is defined as a twin or triplet pregnancy.

[Expert opinion]

Chorionicity

The number of chorionic (outer) membranes that surround babies in a multiple pregnancy. If there is only 1 membrane, the pregnancy is described as monochorionic; if there are 2, the pregnancy is described as dichorionic; and if there are 3, the pregnancy is trichorionic. Monochorionic twin pregnancies and monochorionic/dichorionic triplet pregnancies carry higher risks because babies share a placenta.

[NICE's guideline on twin and triplet pregnancy, terms used in this guideline]

Amnionicity

The number of amnions (inner membranes) that surround babies in a multiple pregnancy. Pregnancies with 1 amnion (so that all babies share an amniotic sac) are described as monoamniotic; pregnancies with 2 amnions are diamniotic; and pregnancies with 3 amnions are triamniotic.

[NICE's guideline on twin and triplet pregnancy, terms used in this guideline]

Ultrasound scan

An ultrasound scan is used to determine chorionicity based on the number of placental masses, the Lambda or T-sign and the presence of amniotic membrane(s) and membrane thickness.

[NICE's guideline on twin and triplet pregnancy, recommendation 1.1.3]

Note: NICE's guideline on <u>antenatal care</u> recommends determination of gestational age from 10 weeks 0 days. However, the aim in NICE's guideline on <u>twin and triplet pregnancy</u> is to minimise the number of scan appointments that women need to attend within a short time, especially if it is already known that a woman has a twin or triplet pregnancy (for example, as a result of IVF treatment).

Recording the chorionicity and amnionicity

The chorionicity and amnionicity of the pregnancy should be documented in the ultrasound report. An electronic copy of the ultrasound report and an ultrasound image (of Lambda or T sign) should be stored on the radiology reporting and picture archiving system. Hard copies of the report should be printed out and placed in the woman's hand-held maternity notes and their hospital notes.

[Expert opinion]

Equality and diversity considerations

Some pregnant women have complex social needs and may be less likely to access or maintain contact with antenatal care services. Examples of women with complex social needs include, but are not limited to, women who:

- have a history of substance misuse (alcohol or drugs)
- have recently arrived in the UK as a migrant, asylum seeker or refugee
- have difficulty speaking or understanding English
- are aged under 20 years
- have experienced domestic abuse
- are living in poverty
- are homeless.

It is therefore appropriate that professionals give special consideration to women with complex social needs. NICE's guideline on <u>pregnancy and complex social factors</u> includes recommendations on how to make antenatal care accessible to pregnant women with complex social needs and how to encourage women to maintain ongoing contact with maternity services.

Quality statement 2: Labelling the fetuses

Quality statement

Women with a multiple pregnancy have their fetuses labelled using ultrasound and recorded between 11 weeks 0 days and 13 weeks 6 days.

Rationale

Labelling the fetuses and recording this in the notes at the dating scan, using left and right, or upper and lower, allows the fetuses to be consistently identified throughout the pregnancy. It also takes into account that the 'leading' fetus may change as pregnancy progresses and labelling by number can cause confusion, particularly with left and right fetuses.

Quality measures

Structure

Evidence of local arrangements to ensure that women with a multiple pregnancy have their fetuses labelled using an ultrasound scan and recorded between 11 weeks 0 days and 13 weeks 6 days.

Data source: Local data collection.

Process

The proportion of women with a multiple pregnancy who have their fetuses labelled using an ultrasound scan and recorded between 11 weeks 0 days and 13 weeks 6 days.

Numerator – the number of women in the denominator who have had their fetuses labelled using an ultrasound scan and recorded between 11 weeks 0 days and 13 weeks 6 days.

Denominator – the number of women with a multiple pregnancy of greater than 14 weeks' gestation.

Data source: Local data collection.

Outcome

Consistent identification of fetuses in multiple pregnancies.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers ensure that systems are in place for women with a multiple pregnancy to have their fetuses labelled using an ultrasound scan and recorded between 11 weeks 0 days and 13 weeks 6 days.

Healthcare practitioners ensure that women with a multiple pregnancy have their fetuses labelled using an ultrasound scan and recorded between 11 weeks 0 days and 13 weeks 6 days.

Commissioners ensure that that they commission specialist services for women with a multiple pregnancy to have their fetuses labelled using an ultrasound scan and recorded between 11 weeks 0 days and 13 weeks 6 days.

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) have an ultrasound scan between 11 weeks and 13 weeks 6 days of their pregnancy to record the positions of their babies.

Source guidance

Twin and triplet pregnancy (2019) NICE guideline NG137, recommendation 1.1.4

Definitions of terms used in this quality statement

Multiple pregnancy

A multiple pregnancy is defined as a twin or triplet pregnancy.

[Expert opinion]

Ultrasound scan

An ultrasound scan is used to determine chorionicity based on the number of placental masses, the Lambda or T-sign and the presence of amniotic membrane(s) and membrane thickness.

[NICE's guideline on twin and triplet pregnancy, recommendation 1.1.3]

Note: NICE's guideline on <u>antenatal care</u> recommends determination of gestational age from

10 weeks 0 days. However, the aim in NICE's guideline on <u>twin and triplet pregnancy</u> is to minimise the number of scan appointments that women need to attend within a short time, especially if it is already known that a woman has a twin or triplet pregnancy (for example, as a result of IVF treatment).

Labelling the fetuses

Labelling of the fetuses should be documented in the ultrasound report. An electronic copy of the ultrasound report and an ultrasound image should also be stored on the radiology reporting and picture archiving system. Hard copies of the report should be printed out and placed in the women's hand-held maternity notes and their hospital notes.

The fetuses should be labelled using either the lateral orientation (left and right) or the vertical orientation (upper and lower). Labelling of fetuses should be carried out at all ultrasound scans to ensure consistent identification throughout the pregnancy.

[Expert opinion]

Equality and diversity considerations

Some pregnant women have complex social needs and may be less likely to access or maintain contact with antenatal care services. Examples of women with complex social needs include, but are not limited to, women who:

- have a history of substance misuse (alcohol or drugs)
- have recently arrived in the UK as a migrant, asylum seeker or refugee
- have difficulty speaking or understanding English
- are aged under 20 years
- have experienced domestic abuse
- are living in poverty
- are homeless.

It is therefore appropriate that professionals give special consideration to women with complex social needs. NICE's guideline on <u>pregnancy and complex social factors</u> includes recommendations on how to make antenatal care accessible to pregnant women with complex social needs and how

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to encourage women to maintain ongoing contact with maternity services.						
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Quality statement 3: Composition of the multidisciplinary core team

Quality statement

Women with a multiple pregnancy are cared for by a multidisciplinary core team.

Rationale

Women with a multiple pregnancy should have their clinical care provided by a multidisciplinary core team because of the increased risks and complications associated with multiple births.

Members of this team will have the expertise needed to provide high-quality care for women with a multiple pregnancy. It may be appropriate for the multidisciplinary core team to refer women to the community midwifery team for some of their additional antenatal appointments.

Quality measures

Structure

Evidence of local arrangements to ensure that women with a multiple pregnancy are cared for by a multidisciplinary core team.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers ensure that systems are in place for women with a multiple pregnancy to be cared for by a multidisciplinary core team.

Healthcare practitioners ensure that women with a multiple pregnancy are cared for by a multidisciplinary core team.

Commissioners ensure that they commission services for women with a multiple pregnancy to be cared for by a multidisciplinary core team.

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) are cared for by a team of healthcare professionals with different skills and roles (for example, specialist doctors, specialist midwives and ultrasound operators).

Source guidance

Twin and triplet pregnancy (2019) NICE guideline NG137, recommendation 1.3.1

Definitions of terms used in this quality statement

Multiple pregnancy

A multiple pregnancy is defined as a twin or triplet pregnancy.

[Expert opinion]

Multidisciplinary core team

A multidisciplinary core team of named specialists consists of specialist obstetricians, specialist midwives and ultrasonographers, all of whom have experience and knowledge of managing twin and triplet pregnancies.

A specialist obstetrician is an obstetrician with a special interest, experience and knowledge of managing multiple pregnancy, and who works regularly with women with a multiple pregnancy.

A specialist midwife is a midwife with a special interest, experience and knowledge of managing multiple pregnancy, and who works regularly with women with a multiple pregnancy.

An ultrasonographer is a healthcare professional with a postgraduate certificate in the performance and interpretation of obstetric ultrasound examinations.

The multidisciplinary core team should coordinate clinical care for women with twin and triplet pregnancies to:

- minimise the number of hospital visits
- provide care as close to the woman's home as possible
- provide continuity of care within and between hospitals and the community; the community includes GPs in primary care, and community midwives and health visitors.

The multidisciplinary core team should offer information and emotional support specific to twin and triplet pregnancies at their first contact with the woman and provide ongoing opportunities for further discussion and advice including:

- antenatal and postnatal mental health and wellbeing
- antenatal nutrition
- the risks, symptoms and signs of preterm labour and the potential need for corticosteroids for fetal lung maturation
- likely timing and possible modes of delivery
- breastfeeding
- parenting.

[Adapted from NICE's guideline on <u>twin and triplet pregnancy</u>, recommendations 1.3.1, 1.3.4, 1.3.5 and terms used in this guideline]

Quality statement 4: Care planning

Quality statement

Women with a multiple pregnancy have a care plan that specifies the timing of appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

Rationale

Women with a multiple pregnancy should have most of their antenatal appointments with a member of the multidisciplinary core team. The number of appointments and ultrasound scans a woman should have depends on the chorionicity and amnionicity of her pregnancy and any associated risk factors or complications.

Women should have a record of the expected number of antenatal appointments they should attend, who they should have them with and where they will take place.

Quality measures

Structure

a) Evidence of local arrangements to ensure that women with a multiple pregnancy have a care plan that specifies the timing of antenatal care appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

Data source: Local data collection.

b) Evidence of local audit to monitor the completeness and accuracy of the antenatal care plan for women with a multiple pregnancy.

Data source: Local data collection.

Process

The proportion of women with a multiple pregnancy who have a care plan that specifies the timing of antenatal care appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

Numerator - the number of women in the denominator who have a care plan that specifies the

timing of antenatal care appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

Denominator – the number of women with a multiple pregnancy.

Data source: Local data collection.

Outcome

Women feel informed about their care and know which healthcare professionals they should see and when.

Data source: Local data collection. Data will also be collected against <u>NHS outcomes framework</u> 2013/14 indicator 4.5 'Women's experience of maternity services'.

What the quality statement means for different audiences

Service providers ensure that systems are in place for women with a multiple pregnancy to have a care plan that specifies the timing of antenatal care appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

Healthcare practitioners provide women who have a multiple pregnancy with a care plan that specifies the timing of antenatal care appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

Commissioners ensure that they commission services that provide women who have a multiple pregnancy with a care plan that specifies the timing of antenatal care appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) have a care plan that has the dates and times of all their antenatal care appointments and details of who the appointments are with.

Source guidance

Twin and triplet pregnancy (2019) NICE guideline NG137, recommendations 1.1.13 and 1.3.7 to 1.3.10

Definitions of terms used in this quality statement

Multiple pregnancy

A multiple pregnancy is defined as a twin or triplet pregnancy.

[Expert opinion]

Multidisciplinary core team

A multidisciplinary core team of named specialists consists of specialist obstetricians, specialist midwives and ultrasonographers, all of whom have experience and knowledge of managing twin and triplet pregnancies.

A specialist obstetrician is an obstetrician with a special interest, experience and knowledge of managing multiple pregnancy, and who works regularly with women with a multiple pregnancy.

A specialist midwife is a midwife with a special interest, experience and knowledge of managing multiple pregnancy, and who works regularly with women with a multiple pregnancy.

An ultrasonographer is a healthcare professional with a postgraduate certificate in the performance and interpretation of obstetric ultrasound examinations.

[Adapted from NICE's guideline on <u>twin and triplet pregnancy</u>, recommendations 1.3.1, 1.3.4, 1.3.5 and terms used in this guideline]

Care plan

A care plan should be provided at determination of chorionicity, which specifies the frequency and timing of antenatal care appointments. The care plan should contain the recommended schedule of specialist antenatal appointments according to the chorionicity and amnionicity of a pregnancy, as detailed in the NICE guideline on twin and triplet pregnancy.

Women may be seen for additional antenatal appointments in the community with healthcare professionals outside the multidisciplinary core team, such as neonatal unit staff, community midwives and GPs. The scheduling of these appointments will be coordinated by the multidisciplinary core team.

[Expert opinion]

Quality statement 5: Monitoring for fetal complications

Quality statement

Women with a multiple pregnancy are monitored for fetal complications according to the chorionicity and amnionicity of their pregnancy.

Rationale

Multiple pregnancies are associated with increased risk of fetal complications. Fetal growth restriction is more likely to occur in monochorionic and dichorionic multiple pregnancies. There is a risk of feto-fetal transfusion syndrome with monochorionic multiple pregnancies. Therefore, it is important to monitor monochorionic and dichorionic multiple pregnancies closely for fetal complications in order to manage them effectively should they arise.

Quality measures

Structure

Evidence of local arrangements to ensure that women with a multiple pregnancy are monitored for fetal complications according to the chorionicity and amnionicity of their pregnancy.

Data source: Local data collection.

Process

a) The proportion of women with a monochorionic multiple pregnancy who receive diagnostic monitoring for feto-fetal transfusion syndrome using ultrasound from 16 weeks and every 14 days until birth.

Numerator – the number of women in the denominator who received diagnostic monitoring for feto-fetal transfusion syndrome using ultrasound from 16 weeks and every 14 days until birth.

Denominator – the number of women who had a monochorionic multiple pregnancy and a gestational age greater than 16 weeks.

Data source: Local data collection.

b) The proportion of women with a monochorionic multiple pregnancy who receive diagnostic

monitoring for fetal weight discordance using 2 or more biometric parameters and amniotic fluid level assessment at each ultrasound scan from 16 weeks.

Numerator – the number of women in the denominator who received diagnostic monitoring for fetal weight discordance using 2 or more biometric parameters and amniotic fluid level assessment at each ultrasound scan from 16 weeks.

Denominator – the number of women with a monochorionic multiple pregnancy and a gestational age greater than 16 weeks.

Data source: Local data collection.

c) The proportion of women with a dichorionic twin or trichorionic triplet pregnancy who receive diagnostic monitoring for fetal weight discordance using 2 or more biometric parameters and amniotic fluid levels at each ultrasound scan from 24 weeks.

Numerator – the number of women in the denominator who received diagnostic monitoring for fetal weight discordance using 2 or more biometric parameters and amniotic fluid levels at each ultrasound scan from 24 weeks.

Denominator – the number of women with a dichorionic twin or trichorionic triplet pregnancy and a gestational age greater than 24 weeks.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers ensure that systems are in place to ensure that women with a multiple pregnancy can be monitored for fetal complications according to the chorionicity and amnionicity of their pregnancy.

Healthcare practitioners ensure that women with a multiple pregnancy are monitored for fetal complications according to the chorionicity and amnionicity of their pregnancy.

Commissioners ensure that they commission services that monitor women with a multiple pregnancy for fetal complications according to the chorionicity and amnionicity of their pregnancy.

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) are

monitored to check the babies for any complications (for example, to check the babies' growth and blood flow) in a way that is appropriate for their pregnancy.

Source guidance

<u>Twin and triplet pregnancy</u> (2019) NICE guideline NG137, recommendations 1.4.18, 1.4.19, 1.4.22, 1.4.25 to 1.4.27, 1.4.31 and 1.4.35

Definitions of terms used in this quality statement

Multiple pregnancy

A multiple pregnancy is defined as a twin or triplet pregnancy.

[Expert opinion]

Fetal growth restriction

A difference in size of 25% or more between twins or triplets, known as fetal weight discordance, and an estimated fetal weight of any of the babies below the 10th centile for gestational age are clinically significant indicators of fetal growth restriction. The number of scans women receive to monitor for fetal growth restriction is determined by the amnionicity and chorionicity of the pregnancy and should follow the recommended schedule of specialist antenatal appointments, as detailed in the NICE guideline on twin and triplet pregnancy.

[Adapted from NICE's guideline on twin and triplet pregnancy, recommendation 1.4.23]

Fetal biometric parameters

Standard antenatal ultrasound measures to assess the growth and wellbeing of the fetus and monitor for fetal weight discordance, they include:

- head circumference
- abdominal circumference
- femoral length.

[Expert opinion]

Feto-fetal transfusion syndrome

Feto-fetal transfusion syndrome occurs when blood moves from one baby to another. The baby that loses the blood is called the donor and the baby receiving the blood is called the recipient. Feto-fetal transfusion syndrome is a complication of monochorionic multiple pregnancies arising from shared placental circulation. It is also referred to as twin-to-twin transfusion syndrome in twin pregnancies.

[NICE's guideline on twin and triplet pregnancy, terms used in this guideline]

Quality statement 6: Involving a consultant from a tertiary level fetal medicine centre

Quality statement

Women with a higher-risk or complicated multiple pregnancy have a consultant from a tertiary level fetal medicine centre involved in their care.

Rationale

Collaborative care between local services and tertiary level fetal medicine centres allows access to appropriate knowledge and expertise, and tertiary level neonatal and paediatric services when needed, while maintaining the focus on delivery of care locally.

A consultant from a tertiary level fetal medicine centre needs to be involved in some of the decisions about the care provided for women with a higher-risk multiple pregnancy, or if there are complications. It may be more suitable to involve the consultant in planning and managing care rather than referring a woman directly.

Quality measures

Structure

Evidence of local arrangements to ensure that women with a higher-risk or complicated multiple pregnancy have a consultant from a tertiary level fetal medicine centre involved in their care.

Data source: Local data collection.

Process

a) The proportion of women with a higher-risk multiple pregnancy who have a consultant from a tertiary level fetal medicine centre involved in their care.

Numerator – the number of women in the denominator who have a consultant from a tertiary level fetal medicine centre involved in their care.

Denominator – the number of women with a higher-risk multiple pregnancy.

Data source: Local data collection.

b) The proportion of women with a complicated multiple pregnancy who have a consultant from a tertiary level fetal medicine centre involved in their care.

Numerator – the number of women in the denominator who have a consultant from a tertiary level fetal medicine centre involved in their care.

Denominator – the number of women with a complicated multiple pregnancy.

Data source: Local data collection.

Outcome

Infant and maternal mortality and morbidity.

Data source: Local data collection. The <u>Maternity Services Data Set</u> collects data on neonatal death (global number 17209680). <u>Mothers and babies: reducing risk through audits and confidential enquiries across the UK (MBRRACE-UK)</u> collects data on: 'all deaths of pregnant women and women up to one year following the end of the pregnancy' and 'neonatal deaths'.

What the quality statement means for different audiences

Service providers ensure that systems are in place to ensure women with a higher-risk or complicated multiple pregnancy have a consultant from a tertiary level fetal medicine centre involved in their care.

Healthcare practitioners ensure that women with a higher-risk or complicated multiple pregnancy have a consultant from a tertiary level fetal medicine centre involved in their care.

Commissioners ensure that they commission services for women with a higher-risk or complicated multiple pregnancy have a consultant from a tertiary level fetal medicine centre involved in their care.

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) have an expert in fetal medicine involved in their care if their pregnancy is higher risk or if there are complications.

Source guidance

Twin and triplet pregnancy (2019) NICE guideline NG137, recommendation 1.7.1

Definitions of terms used in this quality statement

Multiple pregnancy

A multiple pregnancy is defined as a twin or triplet pregnancy.

[Expert opinion]

Tertiary level fetal medicine centre

A specialist regional (or supra-regional) fetal medicine centre that has a multidisciplinary team with the expertise and infrastructure to assess and manage complicated twin and triplet pregnancies. This includes providing complex fetal interventions or therapies, for example, fetoscopic laser ablation for feto-fetal transfusion syndrome; and selective termination of pregnancy using techniques such as fetoscopic cord occlusion or radiofrequency ablation.

[NICE's guideline on twin and triplet pregnancy, terms used in this guideline]

Involving a consultant from a tertiary level fetal medicine centre

Involving a consultant from a tertiary level fetal medicine centre can either be through seeking an opinion and then recording the discussion in the woman's notes, or referring a woman with a higher-risk or complicated multiple pregnancy to a tertiary level fetal medicine centre.

NICE's guideline on <u>twin and triplet pregnancy</u> recommendation 1.7.1 advises the seeking of a consultant opinion from a tertiary level fetal medicine centre for higher-risk multiple pregnancies or complicated multiple pregnancies.

Higher-risk multiple pregnancies are defined as:

- monochorionic monoamniotic twins
- dichorionic diamniotic triplets.
- monochorionic diamniotic triplets

• monochorionic monoamniotic triplets.

Complicated multiple pregnancies are defined as those with:

- fetal weight discordance (of 25% or more) and an estimated fetal weight of any of the babies below the 10th centile for gestational age
- fetal anomaly (structural or chromosomal)
- discordant fetal death
- feto-fetal transfusion syndrome
- twin reverse arterial perfusion sequence (TRAP)
- conjoined twins or triplets
- suspected twin anaemia polycythaemia sequence.

[Adapted from NICE's guideline on twin and triplet pregnancy, recommendation 1.7.1]

Equality and diversity considerations

The woman's preferences should be taken into account when referring them for a consultant opinion at a tertiary level fetal medicine centre. An opinion may be sought from a consultant at a tertiary level fetal medicine centre if the centre is a long distance from the woman's home and it is clinically appropriate to do so.

Care should be delivered locally where possible to minimise inconvenience and anxiety for women and their partners. But anxiety caused by travelling further for an appointment needs to be weighed against the anxiety of an unclear diagnosis or prognosis.

Women from some cultural backgrounds may prefer to have their antenatal examinations undertaken by female members of staff. NHS maternity services are organised so that such preferences can be accounted for and have arrangements in place for female chaperones if needed.

Quality statement 7: Advice and preparation for preterm birth

Quality statement

Women with a multiple pregnancy have a discussion by 24 weeks with one or more members of the multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

Rationale

The multidisciplinary core team have expert knowledge in managing multiple pregnancies. Women with a multiple pregnancy are at increased risk of maternal and fetal complications in pregnancy and preterm birth. It is important that they are given advice on the possible risks, signs and symptoms of preterm labour so that they know what to expect and who to contact quickly if such symptoms arise. Women should also be informed that a preterm birth is associated with an increased risk of admission to a neonatal unit.

Quality measures

Structure

Evidence of local arrangements to ensure that women with a multiple pregnancy have a discussion by 24 weeks with one or more members of the multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

Data source: Local data collection.

Process

The proportion of women with a multiple pregnancy who have a discussion by 24 weeks with one or more members of the multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

Numerator – the number of women in the denominator who have had a discussion by 24 weeks with one or more members of the multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

Denominator – the number of women with a multiple pregnancy that is greater than 24 weeks' gestation.

Data source: Local data collection. NHS Maternity Statistics - 2010/2011:

- 'Complications during non-delivery obstetric episodes, 2010/11 (Table 24).
- Singleton, twin and higher order multiple deliveries by gestation and birth status, 2010/11 (Table 26).'

Outcome

Levels of satisfaction with support and confidence to recognise the signs and symptoms of preterm labour.

Data source: Local data collection. Data will also be collected against <u>NHS Outcomes Framework</u> 2013/14: indicator 4.5 'Women's experience of maternity services'.

The Care Quality Commission's <u>Maternity services survey 2018</u> collected data on singleton and multiple births and asked the questions 'Thinking about your antenatal care, were you spoken to in a way that you could understand?' and 'Thinking about your antenatal care, were you involved enough in decisions about your care?'. The total number of respondents is also stated, although results are not broken down by singleton or multiple pregnancies.

What the quality statement means for different audiences

Service providers ensure that systems are in place for women with a multiple pregnancy to have a discussion by 24 weeks with one or more members of multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

Healthcare practitioners ensure that women with a multiple pregnancy have a discussion by 24 weeks with one or more members of multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

Commissioners ensure that they commission services in which women with a multiple pregnancy have a discussion by 24 weeks with one or more members of multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) discuss the risks and signs of an early (preterm) labour with one or more members of their healthcare team. The discussion should take place by 24 weeks of their pregnancy and also cover the possible problems associated with an early birth.

Source guidance

Twin and triplet pregnancy (2019) NICE guideline NG137, recommendations 1.3.5 and 1.9.3

Definitions of terms used in this quality statement

The timeframe of 'by 24 weeks' is included based on expert consensus.

Multiple pregnancy

A multiple pregnancy is defined as a twin or triplet pregnancy.

[Expert opinion]

Preterm labour

The risk of preterm birth is higher in multiple pregnancies. About 60 in 100 twin pregnancies are delivered by 37 weeks, and 75 in 100 triplet pregnancies are delivered by 35 weeks.

The benefits and risks of targeted corticosteroids for fetal lung maturation should be discussed when providing information about preterm labour.

The signs and symptoms of preterm labour include more frequent and regular contractions, ruptured membranes, unusual or severe backache or other pain.

The potential need for neonatal management and the role of neonatal networks, including the possibility of admission of babies to a neonatal unit after birth, should also be discussed. Where possible, staff from the neonatal unit should be involved in the discussion and women should be provided with appropriate information about the neonatal services.

[NICE's guideline on twin and triplet pregnancy, recommendations 1.3.5 and 1.9.1 to 1.9.3]

Equality and diversity considerations

Information on the risks, signs and symptoms of preterm labour should be understood by all women so that they can feel fully informed. Information should be provided in an accessible format (particularly for women with physical, sensory or learning disabilities and women who do not speak or read English).

Quality statement 8: Preparation for birth

Quality statement

Women with a multiple pregnancy have a discussion by 28 weeks with one or more members of the multidisciplinary core team about the timing of birth and possible modes of delivery so that a birth plan can be agreed.

Rationale

Most women with multiple pregnancies deliver by 37 weeks either spontaneously or electively. This discussion should include the risks and benefits of different modes of birth and how they are managed to enable women to make an informed decision about their birth preference. Women should also be informed that a preterm birth is associated with an increased risk of admission to a neonatal unit.

Quality measures

Structure

Evidence of local arrangements to ensure that women with a multiple pregnancy have a discussion with one or more members of the multidisciplinary core team by 28 weeks about the timing of birth and possible modes of delivery so that a birth plan can be agreed.

Data source: Local data collection.

Process

The proportion of women with a multiple pregnancy who have a discussion with one or more members of the multidisciplinary core team by 28 weeks about the timing of birth and possible modes of delivery.

Numerator – the number of women in the denominator who have had a discussion with one or more members of the multidisciplinary core team by 28 weeks about the timing of birth and possible modes of delivery.

Denominator – the number of women with a multiple pregnancy of 28 weeks or more.

Data source: Local data collection.

Outcome

Women feel well informed and able to make decisions that reflect what is important to them about the options for delivery.

Data source: Local data collection. The <u>Maternity Services Data Set</u> collects data on delivery method (global number 2016160) and gestational age at birth (global number 17206120). Data will also be collected against <u>NHS Outcomes Framework 2013/14</u>: indicator 4.5 'Women's experience of maternity services'.

What the quality statement means for different audiences

Service providers ensure that systems are in place for women with a multiple pregnancy to have a discussion with one or more members of the multidisciplinary core team by 28 weeks about the timing of birth and possible modes of delivery so that a birth plan can be agreed.

Healthcare practitioners from the multidisciplinary core team ensure that the timing of birth and possible modes of delivery are discussed with women with a multiple pregnancy by 28 weeks so that a birth plan can be agreed.

Commissioners ensure that they commission services so that women with a multiple pregnancy have a discussion with one or more members of the multidisciplinary core team by 28 weeks about the timing of birth and possible modes of delivery so that a birth plan can be agreed.

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) have a discussion with one or more members of their healthcare team about the timing of the birth and how they want their babies to be delivered. This discussion needs to take place by 28 weeks of their pregnancy and include agreement of their birth plan.

Source guidance

Twin and triplet pregnancy (2019) NICE guideline NG137, recommendation 1.8.2

Definitions of terms used in this quality statement

Multiple pregnancy

A multiple pregnancy is defined as a twin or triplet pregnancy.

[Expert opinion]

Multidisciplinary core team

A multidisciplinary core team of named specialists consists of specialist obstetricians, specialist midwives and ultrasonographers, all of whom have experience and knowledge of managing twin and triplet pregnancies.

A specialist obstetrician is an obstetrician with a special interest, experience and knowledge of managing multiple pregnancy, and who works regularly with women with a multiple pregnancy.

A specialist midwife is a midwife with a special interest, experience and knowledge of managing multiple pregnancy, and who works regularly with women with a multiple pregnancy.

An ultrasonographer is a healthcare professional with a postgraduate certificate in the performance and interpretation of obstetric ultrasound examinations.

[Adapted from NICE's guideline on <u>twin and triplet pregnancy</u>, recommendations 1.3.1, 1.3.4, 1.3.5 and terms used in this guideline]

Equality and diversity considerations

Information on the timing of birth and possible modes of delivery should be understood by all women to enable them to make informed decisions. Information should be provided in an accessible format (particularly for women with physical, sensory or learning disabilities, and women who do not speak or read English).

Using the quality standard

Quality measures

The quality measures accompanying the quality statements aim to improve the structure, process and outcomes of healthcare. They are not a new set of targets or mandatory indicators for performance management.

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so aspirational achievement levels are likely to be 100% (or 0% if the quality statement states that something should not be done). However, it is recognised that this may not always be appropriate in practice taking account of patient safety, patient choice and clinical judgement and therefore desired levels of achievement should be defined locally.

See NICE's <u>how to use quality standards</u> for further information, including advice on using quality measures..

Using other national guidance and policy documents

Other national guidance and current policy documents have been referenced during the development of this quality standard. It is important that the quality standard is considered by commissioners, providers, health and social care practitioners, patients, service users and carers alongside the documents listed in <u>development sources</u>.

Diversity, equality and language

During the development of this quality standard, equality issues have been considered and <u>equality</u> <u>assessments</u> are available.

Good communication between healthcare practitioners and women with a multiple pregnancy is essential. Treatment, care and support, and the information given about it, should be culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English. Women with a multiple pregnancy should have access to an interpreter or advocate if needed.

Commissioners and providers should aim to achieve the quality standard in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.

Development sources

Further explanation of the methodology used can be found in the quality standards process guide on the NICE website.

Evidence sources

The documents below contain recommendations from NICE guidance or other NICE-accredited recommendations that were used by the Topic Expert Group to develop the quality standard statements and measures.

- Twin and triplet pregnancy (2019) NICE guideline NG137
- Antenatal care (2008, updated 2019) NICE guideline CG62

Policy context

It is important that the quality standard is considered alongside current policy documents, including:

- Care Quality Commission (2019) Maternity services survey 2018
- Department of Health (2011) Parents' views on the maternity journey and early parenthood
- Centre for Maternal and Child Enquiries (2011) Perinatal mortality 2009
- Centre for Maternal and Child Enquiries (2010) <u>Maternal obesity in the UK: findings from a national project</u>
- Twins and Multiple Births Association (TAMBA; 2009) <u>Multiple failings: parents of twins and triplets experience of pre and postnatal NHS care (TAMBA Health and Lifestyle Survey 2008)</u>

Definitions and data sources for the quality measures

- The Care Quality Commission (2018) <u>Maternity services survey 2018</u>
- Department of Health (2012) NHS Outcomes Framework 2012/13
- Department of Health (2012) <u>Improving outcomes and supporting transparency: Part 1: a public health outcomes framework for England, 2013–2016</u>

- NHS Digital (2011) NHS Maternity Statistics 2010/2011
- NHS Digital Maternity Services Data Set [accessed September 2013]

Related NICE quality standards

Published

- Preterm labour and birth (2016, updated 2019) NICE quality standard 135
- Postnatal care (2013, updated 2015) NICE quality standard 37
- Hypertension in pregnancy (2013, updated 2019) NICE quality standard 35
- Caesarean section (2013) NICE quality standard 32
- Antenatal care (2012, updated 2016) NICE quality standard 22
- Patient experience in adult NHS services (2012, updated 2019) NICE quality standard 15
- Specialist neonatal care (2010) NICE quality standard 4
- <u>Venous thromboembolism in adults: reducing the risk in hospital</u> (2010, updated 2018) NICE quality standard 3

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Update information

August 2019: Changes have been made to align this quality standard with the NICE guideline on twin and triplet pregnancy. The timeframe in statement 8 has been amended in line with the updated guideline. References and links to source guidance have also been updated.

About this quality standard

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. NICE quality standards draw on existing NICE or NICE-accredited guidance that provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

The methods and processes for developing NICE quality standards are described in the <u>quality</u> standards process guide.

This quality standard has been incorporated into the NICE Pathways for <u>twin and triplet pregnancy</u> and <u>antenatal care</u>.

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Endorsing organisation

This quality standard has been endorsed by NHS England, as required by the Health and Social Care Act (2012)

Supporting organisations

Many organisations share NICE's commitment to quality improvement using evidence-based guidance. The following supporting organisations have recognised the benefit of the quality standard in improving care for patients, carers, service users and members of the public. They have agreed to work with NICE to ensure that those commissioning or providing services are made aware of and encouraged to use the quality standard.

- Multiple Births Foundation
- Royal College of General Practitioners (RCGP)
- Royal College of Nursing (RCN)
- Royal College of Obstetricians and Gynaecologists
- TAMBA